

Date: Tuesday, 08/07/2008 1:01:04 PM  
User: Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : ARM  
Job Number : 40367  
Estimate Number : 13350  
P.O. Number :  
This Issue : 08/07/2008 S.O. No. :  
Prsht Rev. : NC Part Number : D35891  
First Issue : / / Type : SMALL / MED FAB Drawing Number : D3589 REV B PRELIM 08.06.26  
Previous Run : 05030 Drawing Revision : B PRELIM  
Material :  
Due Date : 15/07/2008 Qty: 1 Um: Each  
Written By :  
Checked & Approved By :  
Comment : Est Rev:A 08-05-29 new issue DD verified by:EC

## Additional Product

PRELIMINARY ISSUE



Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

M304TR0375W065

304 RD Tube .375 x .065W



Comment: Qty.: 1.6520 f(s)/Unit Total: 1.6520 f(s)

304 RD Tube .375 x .065W

batch: ~~M-18993~~ 18993 FF 08-07-05 FF 08-07-09 ①

2.0

SMALL FAB 1

SMALL &amp; MEDIUM FAB RESOURCE 1



Comment: SMALL &amp; MEDIUM FAB RESOURCE 1

1- cut D3589-1 as per dwg D3589

2- deburr both ends as per dwg D3589 FF 08-07-09 ①

3.0

QC5

INSPECT WORK TO CURRENT STEP



ENGINEERING APPROVAL



Comment: INSPECT WORK TO CURRENT STEP 08-07-21 5/20/09 ②

4.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 08.08.06 08.07.14 ①

USED ON D3589-041 08.07.21  
P/W: B40366

5.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE 09/02/17 ①

Job Completion



POSITIVE RECALL

EFFECTIVE 08-07-21 AUTH ①

RELEASED 09-02-17 DATE ①

POSITIVE RECALL

EFFECTIVE 08-07-09 AUTH ①

RELEASED 08-07-14 DATE ①

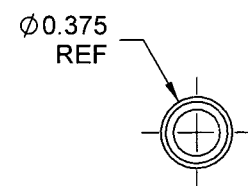
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

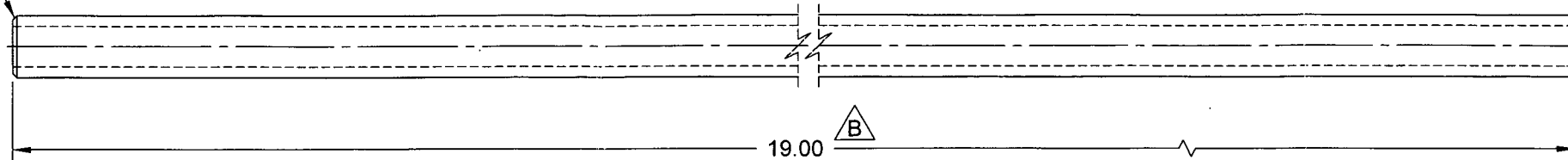
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

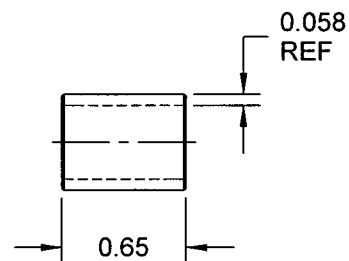
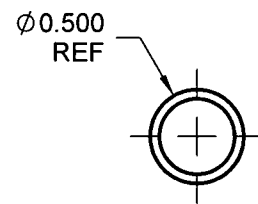


0.03 X 45°  
CHAMFER  
2 PL

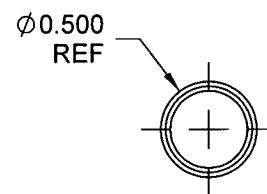


0.065  
REF

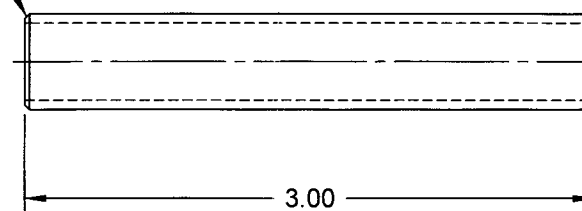
**D3589-1 ARM**



**D3589-3 ARM GUIDE**



0.03 X 45°  
CHAMFER  
2 PL



0.049  
REF

**D3589-5 LATCH GUIDE**

**D3589-1/-3/-5 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING  
D3589-1: 0.375 O.D. X 0.065 WALL (REF. DART SPEC M304TR0.375W.065)  
D3589-3: 0.500 O.D. X 0.058 WALL (REF. DART SPEC M304TR0.500W.058)  
D3589-5: 0.500 O.D. X 0.049 WALL (REF. DART SPEC M304TR0.500W.049)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: - D3589-1 = 0.34 lbs  
- D3589-3 = 0.01 lbs  
- D3589-5 = 0.06 lbs

**PRELIMINARY ISSUE**  
08.06.26

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		<b>D3589</b>	SHEET 4 OF 8
APPROVED		TITLE	SCALE
DE APPR.		<b>LATCH ASSEMBLY</b>	NTS
DATE	08.06.25	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Date: Tuesday, 08/07/2008 1:01:04 PM  
 User: Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : ARM
Job Number : 40367	
Estimate Number : 13350	
P.O. Number :	Part Number : D35891
This Issue : 08/07/2008 S.O. No. :	Drawing Number : D3589 REV B PRELIM
Prsht Rev. : NC	Project Number : N/A
First Issue : // Type : SMALL /MED FAB	Drawing Revision : B PRELIM
Previous Run : 05030	Material :
Written By : <u>[Signature]</u>	Due Date : 15/07/2008 Qty: 1 Um: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est Rev:A 08-05-29 new issue DD verified by:EC	

Seq. #:	Machine Or Operation:	Description :
1.0	M304TR0375W065	304 RD Tube .375 x .065W
Comment: Qty.: 1.6520 f(s)/Unit Total: 1.6520 f(s) 304 RD Tube .375 x .065W batch: <u>M-2933 18993 RF 08-07-05 FF 08-07-09</u>		
2.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
Comment: SMALL & MEDIUM FAB RESOURCE 1 1- cut D3589-1 as per dwg D3589 2- deburr both ends as per dwg D3589 <u>FF 08-07-09</u>		
3.0	QC5	INSPECT WORK TO CURRENT STEP
Comment: INSPECT WORK TO CURRENT STEP <u>h 08-07-21 5/20/09</u>		
4.0	PACKAGING 1	PACKAGING RESOURCE #1
Comment: PACKAGING RESOURCE #1 Identify and Stock Location: _____ <u>USED ON D3589-041 B/W: P40366 PD 08-07-14</u>		
5.0	QC21	FINAL INSPECTION/W/O RELEASE
Comment: FINAL INSPECTION/W/O RELEASE		
Job Completion	<u>U 08-07-21</u> POSITIVE RECALL EFFECTIVE <u>08-07-09</u> AUTH <u>[Signature]</u> RELEASED <u>[Signature]</u> DATE <u>08-07-21</u>	

**Dart Aerospace Ltd**

1270 Aberdeen Street  
Hawkesbury, Ontario K6A 1K7  
Phone: (613) 632-9577  
Fax: (613) 632-1053

**Receiving Slip**

Date Nov 17, 2005	Page 1
Receipt Number RCP00000103	

**REFERENCE ONLY****Purchase From:**

Marmon/Keystone Canada Ltd.  
290 Chemin du Tremblay  
Boucherville, QC J4B 5X9  
Canada

**Ship To:**

Main Finished Goods Locations

**REFERENCE ONLY****REFERENCE ONLY**

Reference	Description	Contact	Vendor Number	PO Number
		Linda Lacelle	VC-MAR001	2008892

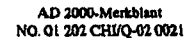
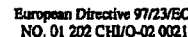
Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
M304TR0.375W.035	M304TR0375W035	304 TUBING B/N18993	100.0000	f	1.200000	120.00	Nov 17, 2005
M304TR0.375W.065	M304TR0375W065	304 RD Tube .375 x .06 B/N18993	100.0000	f	2.120000	212.00	Nov 17, 2005
Cuts.							

**Comments:**



**CHANGSHU WALSHIN SPECIALTY STEEL CO., LTD.** EN ISO9001

**EN ISO 9001**  
**NO. 09 100 81166**



2005/01/27

CONDITION: COLD FINISHED, ANNEALED, PICKLED, PLAIN END

**CERTIFICATE NO.: 200501298024009**

COMMODITY: STAINLESS STEEL COLD FINISHED SEAMLESS TUBE

GRADE: TP316/316L

575 .375 .065 3162

### CHEMICAL COMPOSITION (WT%)

ELEMENTS		C	Si	Mn	P	S	Ni	Cr	Mo	N	Cu	Ti	Cb+Ta	Co	Al	V	B
SPECIFICATION	min						11	16	2								
	max	0.035	0.75	2	0.04	0.03	14	18	3								
RESULTS (LADLE)		0.021	0.4	0.64	0.03	0.001	12.2	16.52	2.07								
RESULTS(PRODUCT)		0.017	0.4	0.62	0.035	0.002	12.16	16.33	2.086								

[illegible]

**TOTAL:**

REMARK:

AS PER ASTM A213-01a/ASME SA213-01a

**PO#BN8469**

LENGTH:20FT

RB: 80 MAX

**MADE IN CHINA**

**400# POLISHED**

**QC REVIEWED**

FEB 15 2005

1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN BEEN MADE IN ACCORDANCE WITH THE RESULTS OF THE CONTRACT, AND CONFORM TO THE SPECIFICATION ABOVE.

**2.THE CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.**

**Director, Technology**

WLCs-QP-T24-06

STIS- .375- .065- -316L \* J0409-139 \* 1U04026 \* BN8469 \* 6/22/2005

Date: Wednesday, 30/07/2008 10:54:29 AM

User: Linda Lacelle

**JOB HISTORY : DETAIL**

<b>Job Number</b>	: 40367	<b>Customer</b>	: Dart Helicopters Services
<b>Estimate Number</b>	: 13350	<b>DWG Name</b>	: ARM
<b>Purchase Order #</b>	:	<b>Part Number</b>	: D35891
<b>Complete Date</b>	: 21/07/2008 1:38:21	<b>DWG Number</b>	: D3589 REV B PRELIM
		<b>Rev.</b>	: B PRELIM

<b>DUE DATE</b>	<b>ORDERED</b>	<b>DELIVERED</b>
15/07/2008	1	1

**1.0 M304TR0375W065-304 RD Tube .375 x .065W INVENTORY I**

DATE	EMPLOYEE	TYPE	Qty	COST	Lot # 18993 Qty. 2
09/07/2008	FRAN01: Franken, Frans	M304TR0375W065	1.652	\$0.06	

**Subtotal:** QTD: 0 CTD: 2 \$0.06

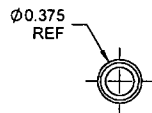
**2.0 SMALL FAB 1 Internal Operation**

DATE	EMPLOYEE	TYPE	Qty	Time(hrs)	COST	MTime(hrs)	Mach. Cost
09/07/2008	FRAN01: Franken, Frans	Run	1.000	0.43	\$7.25	0.43	17.62

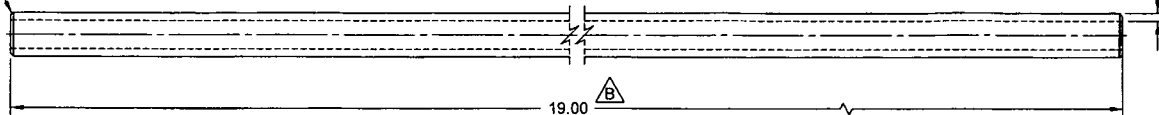
**Subtotal:** QTD: 1 CTD: 0 0.43 \$24.87

		TIME	COST
	Machine Time:	0.43	\$17.62
	Labor:	0.43	\$7.25
	Sub-contract (external Op.):		\$0.00
	INVENTORY ITEM:		\$0.06
	SUB-COMPONENT (SUB-JOB):		\$0.00
<b>Total:</b>			\$24.93

**COST PER UNIT:** \$24.93

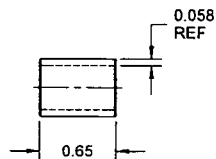
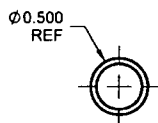


0.03 X 45°  
CHAMFER  
2 PL

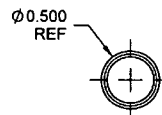


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REF

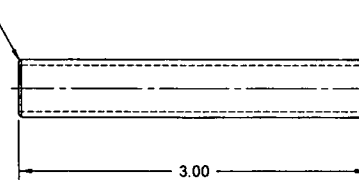
**D3589-1 ARM**



**D3589-3 ARM GUIDE**



0.03 X 45°  
CHAMFER  
2 PL



0.049  
REF

**D3589-5 LATCH GUIDE**

**D3589-1/-3/-5 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING  
D3589-1: 0.375 O.D. X 0.065 WALL (REF. DART SPEC M304TR0.375W.065)  
D3589-3: 0.500 O.D. X 0.058 WALL (REF. DART SPEC M304TR0.500W.058)  
D3589-5: 0.500 O.D. X 0.049 WALL (REF. DART SPEC M304TR0.500W.049)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: - D3589-1 = 0.34 lbs  
- D3589-3 = 0.01 lbs  
- D3589-5 = 0.06 lbs

40367

**RELEASED**  
09/02/05

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. <b>D3589</b>	REV. B
MFG. APPR.		SHEET 4 OF 8	
APPROVED		TITLE	SCALE
DE APPR.		<b>LATCH ASSEMBLY</b>	NTS
DATE	<b>08.06.25</b>	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	